

New Jersey Clean Cities Program 2004 Program Plan Update

TABLE OF CONTENTS

		<u>I</u>	Page Number
I.	Int	roduction	1
II.	Cle	ean Cities Overview	2
III.	Ne	w Jersey Clean Cities Program Development and History	3
	A.	Background	3
	B.	Future Direction	3
IV.	On	going New Jersey Alternative Fuel Vehicle Projects and Initiatives	4
	A.	Ongoing AFV Projects	5
	B.	DOE-Funded Contractor Support	10
	C.	NGV Demonstration Program	11
	D.	Exhibition at Annual Statewide Conferences	12
V.	Ne	w Jersey's Alternative Fuel Vehicle Funding and Incentive Program	ms 12
	A.	Alternative Fuel Vehicle Rebate Program	12
	B.	Biodiesel Fuel Rebate Program	13
	C.	Alternative Fuel Infrastructure Program	13
VI.	Str	ucture of the New Jersey Clean Cities Program	14
	A.	The Clean Cities Coordinator	14
	B.	The Steering Committee	15
	C.	The Working Groups	17
		1) Funding and Project Development	17
		2) Natural Gas Vehicles	17
		3) Neighborhood Electric Vehicles	18
		4) Renewable Fuels	18
		5) Outreach	19
		6) Ad Hoc Working Groups	19
VII.	Go	als and Objectives of the New Jersey Clean Cities Program	20
	A.	Short Term (1-year) Goals	20
	B.	Long Term (5-year) Goals	23
APPENDIX A	4	Memorandum of Understanding	
APPENDIX E	3	AFV and Refueling Infrastructure Summary	

APPENDIX C Stakeholder Commitment Chart

APPENDIX D New Jersey Clean Cities Program Directory

APPENDIX E NJCCP Newsletters

I. Introduction

As one of the country's most densely populated and heavily industrialized states, New Jersey faces air pollution problems second only to those in the Los Angeles metropolitan area. In December, 2003, the U.S. Environmental Protection Agency (EPA) announced its intention to designate the entire State as out of compliance with the National Ambient Air Quality Standards (NAAQS), the agency's health-based standards for ozone. Continued non-compliance with these standards could result in Federal sanctions, including the withholding of Federal highway funds, and will pose a threat to public health, the environment and the economic vitality of the state. The EPA also announced that seven of New Jersey's counties rate among the 25 worst in the nation for air toxics, emitted primarily by cars and trucks.

In addition, the nation's dependence on imported petroleum has continued to worsen in the years since the energy crises of the 1970's, as shown in Figure 1, below. New Jersey is even more dependent on imported petroleum than the nation as a whole.

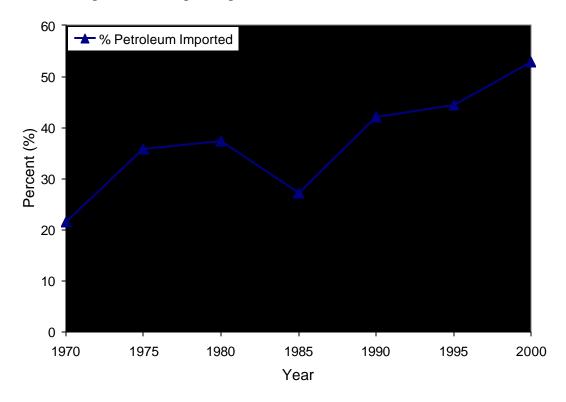


Figure 1: U.S. Net Imported Petroleum as % of Total U.S. Petroleum Usage, 1970-2000 (Source: U.S. DOE EIA AER2002 Table 5.1)

Further, New Jersey has experienced an increase in petroleum fuel consumption between 1997 and 2002, from 13.5 million gallons/day to 14 million gallons per day.

New Jersey's continued economic security requires that we deal with the problems of poor air quality and dependence on imported fuel. The U.S. Department of Energy's Clean Cities Program offers a means of addressing both of these issues.

II. Clean Cities Overview

The Clean Cities Program is a voluntary Federal program designed to accelerate and expand the use of alternative fuel vehicles and related refueling infrastructure in communities throughout the country. Development of the Clean Cities program was authorized by the Energy Policy Act (EPAct) of 1992. Alternative fuels include the following:

- ? Natural gas
- ? Propane
- ? Ethanol
- ? Electricity
- ? Biodiesel
- ? Hydrogen

The Clean Cities Program encourages local governments and other organizations to form public/private partnerships that will lead to the development of a sustainable alternative fuels program. The underlying goals of the Clean Cities Program are **domestic energy security** and **air quality improvement**.

The Energy Policy Act of 1992

The Energy Policy Act of 1992 (EPAct) required the use of alternative fuel vehicles in state fleets, beginning in Model Year 1997. Similar requirements pertain to Federal fleets and alternative fuel provider fleets of 20 or more light-duty vehicles that are used primarily within a Consolidated Metropolitan Statistical Area (CMSA), and are centrally fueled or capable of being centrally fueled. Several titles of the Energy Policy Act focus on the use of alternative fuels as a means of reducing our dependence on imported oil. A further benefit of using alternative fuel vehicles (AFVs) is that they generally emit fewer hydrocarbons and less carbon monoxide than gasoline or diesel powered vehicles, resulting in improved air quality.

All 21 of New Jersey's counties, encompassing two CMSAs, are covered by EPAct requirements. The 13 New Jersey counties comprising the original North Jersey Clean Cities Program area are part of the New York-Northern New Jersey-Long Island CMSA, as is Mercer County. Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem Counties are part of the Philadelphia – Wilmington – Atlantic City CMSA. EPAct covered fleets in New Jersey include the N. J. State government fleet, U.S. Postal Service, U.S. General Services Administration, Public Service Electric & Gas, New Jersey Natural Gas Company and Elizabethtown Gas Company/NUI.

III. New Jersey Clean Cities Program Development and History

A. Background

The New Jersey Board of Public Utilities (NJBPU), in conjunction with the N.J. Departments of Environmental Protection and Transportation, several natural gas utilities, local governments and private sector businesses, initiated the development of the North Jersey Clean Cities Program (NJCCP) in 1996. The program was officially designated by the U.S. Department of Energy on October 30, 1997. Initially, efforts were focused on coordinating the fleet acquisition requirements of EPAct and the Clean Air Act (CAA), enabling the State to meet the air quality improvement goals of the CAA and the energy security goals of EPAct at the least cost to New Jersey residents. From its inception, New Jersey's Clean Cities Program has been fuel neutral and has encouraged the use of a variety of alternative fuels as defined by EPAct.

In the six years since the North Jersey Clean Cities Program was officially designated by the U.S. Department of Energy (DOE), there have been a number of changes in the coalition's alternative fuel vehicle activity. During 1999-2000, the State government undertook a fleet revitalization program that resulted in the purchase of approximately 1,100 AFVs during a 2-year period. Those purchases were subsidized by Petroleum Violators Escrow (PVE) account monies, known in New Jersey as Petroleum Overcharge Reimbursement Fund (PORF) monies. There is little PORF funding remaining, however. In addition, the recent stock market problems and the terrorist attacks of September 11, 2001 resulted in the State Treasury seeing a drop-off in revenues. One result of this has been a dramatic reduction in State government vehicle purchases, including AFVs.

Other recent developments in New Jersey, such as the deregulation of the utility industry, have also had a negative impact on AFV usage in the state. Deregulation resulted in the formation of unregulated utility subsidiaries, and the exemption of many previously covered fuel provider fleets from EPAct mandates. Deregulation also resulted in the State's natural gas utilities reducing their levels of participation in alternative fuel programs.

There have been other recent positive signs, however, including an upsurge in interest in the State's AFV Rebate Program and Biodiesel Rebate Program (see Section V) from municipalities throughout the State, and the successful activities of the NGV Working Group (see Section IV.C). Together, these recent changes have resulted in the need to reassess the direction of the program, as discussed below.

B. Future Direction

With the submission of this Program Plan revision, we are proposing to expand the North Jersey Clean Cities program area to include all 21 counties in the State of New Jersey, and to change the coalition name to the "New Jersey Clean Cities Program."

New Jersey's counties run the gamut from dense urban environments to suburban counties to low-density rural communities and shore counties, providing countless opportunities to introduce AFVs, hybrid-electric vehicles, neighborhood electric vehicles and renewable, American fuels to both the public and private sectors throughout the State.

Expanding the coalition to include the eight most southerly counties (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer and Salem) will result in a relatively small increase in the number of people in the NJCCP area, as the 13 northern counties comprise 75% of the state's population. However, the eight southern counties have some of the fastest population growth rates in the state.

As the southern counties also contain a large portion of the state's agricultural industry, the NJCCP will be able to work with farm communities to encourage the use of locally grown crops to produce renewable fuels such as ethanol and biodiesel. Several strong, new stakeholders are located in the southern counties. The Medford Township Board of Education in Burlington County has been using biodiesel fuel since 1997, and has been active in encouraging other school districts and local governments to consider using biodiesel. Garden State Ethanol, Inc. is in the process of obtaining local approvals to construct a 40-million gallon a year ethanol facility in Salem County that will utilize locally-grown corn.

A number of current NJCCP stakeholders are also active statewide, and have been working with municipal and county governments in the southern portion of the state to encourage the use of AFVs. The construction of two new, large CNG stations at N.J. Department of Transportation (NJDOT) facilities located in Mercer and Camden Counties is nearly complete, and the potential exists to allow local governments to refuel at those stations.

DOE's recent inclusion of idle-reduction technologies in the Clean Cities portfolio of options also opens up possibilities for projects at truck stops/rest areas along the New Jersey Turnpike, which runs the length of the state.

For all of the above reasons, we believe that the New Jersey Clean Cities Program will be a stronger, more effective program by including the eight southern counties in the coalition.

IV. Ongoing New Jersey Alternative Fuel Vehicle Projects and Initiatives

Current AFV and alternative fuel projects are described in this section. Several of the NJCCP stakeholders have activities in more than one county and are listed below as "Regional" participants. Other projects have been grouped according to the county in which they are located.

This listing includes activities being undertaken in the 13 northern New Jersey counties that comprised the original NJCCP, i.e., Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren Counties. Activities in the 8 counties proposed for inclusion in the expanded New Jersey Clean Cities Program, i.e., Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer and Salem, have also been included.

The primary alternative fuels now in use throughout New Jersey are natural gas and biodiesel. Hybrid-electric vehicles have also been included in the current Program Plan because of their low emissions, their ability to displace petroleum and help meet EPAct goals, and the role they can play in DOE's expanded portfolio of options for the Clean Cities Program.

A. Ongoing AFV Projects

Regional

• New Jersey Transit Corporation:

- O Mercer County 5 compressed natural gas (CNG) transit buses have been operating in the Trenton/Ewing/Hamilton area, in Mercer County, in central New Jersey. The buses refuel at the State of New Jersey's CNG station in Ewing Township. These buses are nearly 12 years old and will be retired; 3 of them have been replaced by hybrid-electric transit buses.
- Monmouth County 76 CNG "cruiser" buses currently operate out of the New Jersey Transit garage in Howell Township, Monmouth County. Two 1,325 SCFM compressors were installed there in December, 1999 and a third 1,400 SCFM compressor was added in November, 2000.

o The Port Authority of New York and New Jersey:

- O Currently has 14 electric vehicles (EV), 30 hybrid electric vehicles (HEV), 204 CNG, and 3 liquefied propane gas (LPG) vehicles that operate at Port Authority locations in New York and New Jersey, including Kennedy, LaGuardia and Newark airports. Plans call for adding 30 CNG vehicles a year for the next 5 years.
- O Submitted application to participate in the Biodiesel Fuel Rebate Program. A total of 67 heavy-duty vehicles and 46 pieces of diesel equipment will use approximately 50,000 gallons/year of B20 at Newark Airport.

• Public Service Electric & Gas (PSE&G):

- o Operates 77 dedicated CNG and 228 bi-fuel CNG vehicles.
- o Currently maintains nine CNG refueling stations for use by its own fleet vehicles only. The stations are located in:
 - ? Bergen County- Oakland Township
 - ? Burlington County Burlington and Moorestown
 - ? Passaic County Clifton
 - ? Essex County Orange

- ? Hudson County- Jersey City
- ? Camden County Audubon
- ? Middlesex County New Brunswick, and
- ? Somerset County Plainfield

State of New Jersey

- ? The State government fleet currently contains 1634 bi-fuel CNG, 107 dedicated CNG, 95 propane and 8 electric vehicles.
- ? The State has also purchased 40 Toyota Priuses in the past few years.
- ? Operates 1-100 SCFM CNG refueling station in Ewing Twp. Two additional CNG stations, in Cherry Hill, Camden County (85 SCFM) and Hamilton Twp., Mercer County (100 SCFM) are approximately 95% completed.

o US Postal Service

The Postal Service has 509 E85 capable vehicles in the northern part of the state, and 335 E85 capable vehicles in South Jersey. E85 is not currently commercially available in New Jersey.

Projects by County

Bergen County

- O Bergen County government (Hackensack) The County's Community Transportation Department currently operates 5 compressed natural gas vehicles for the Meals-on-Wheels program. A 50 SCFM fast-fill CNG refueling station has been installed at the County Department of Public Works facility in Hackensack. Refueling agreements have been put in place for State and utility fleet vehicles.
- O Kearny Town The town currently operates 2 bi-fuel CNG Chevy Cavaliers, along with a CNG GMC Sierra 2500 HD pickup truck. A FuelMaker with fast-fill capability has been installed at the DPW Garage. Kearny is pursuing inter-local agreements with surrounding municipalities for use of the CNG station.
- o *Northwest Bergen County Utilities Authority* Operates 3 CNG Ford vans and a FuelMaker slow-fill CNG refueling appliance.
- o *Paramus Borough* Installed a FuelMaker slow-fill CNG refueling appliance; operates 2 Honda Civic GXs.
- o Park Ridge Borough DPW operates 1 Toyota Prius hybrid-electric vehicle
- o *Ridgewood Village* DPW operates 2 Toyota Prius hybrid-electric vehicles.

Burlington County

- o **Burlington County Eco-Complex** Currently participating in a program to use purified landfill gas from the County landfill as a fuel for waste hauling trucks. After purification, the fuel will be liquefied and used as LNG. This program will address the issues involved with full-scale commercialization of the technology, and will include economic and financial analyses.
- o *Medford Township Public Schools* Has operated half its fleet (approximately 20 school buses) on B20 (a mixture of 20% biodiesel and 80% petroleum diesel) since November, 1997, the first school district in the country to do so. Medford has signed a Memorandum of Understanding (MOU) with the BPU to participate in the Biodiesel Fuel Rebate Program and expand the use of B20 to all diesel vehicles in its fleet. Medford anticipates using 50,000 gallons a year of B20.

Camden County

- City of Camden Police Department Operates 14 dedicated CNG Ford Crown Victoria sedans, on loan from the N.J. State Police. Vehicles refuel at PSE&G's CNG station located in Audubon.
- o *Gloucester Township* Operates 2 dedicated CNG cargo vans and a FuelMaker slow-fill refueling appliance. The Township recently decided to purchase additional CNG vehicles and upgrade to a FuelMaker quad unit with fast-fill dispenser.

Cape May County

 Cable Car Concepts, Cape May – Manufactures trolley-type truck bodies and installs alternative fuel systems on vehicle chassis. Trolleys are used as local tourist and excursion vehicles.

Essex County

o *Montclair Township* – Installed a FuelMaker slow-fill CNG refueling appliance and operates 6 Honda Civic GXs.

Hudson County

- o *Guttenberg Town* Installed a FuelMaker slow-fill CNG refueling appliance; operates 1 Honda Civic GX.
- o *Hudson County Improvement Authority* Operates 1 CNG Chevy 8-passenger van; refuels at Bergen County DPW CNG station.
- o *Jersey City* Signed Memorandum of Understanding (MOU) with BPU to participate in the Biodiesel Fuel Rebate Program by using biodiesel fuel

(B20) in city vehicles. City will be reimbursed for incremental costs of approximately 104,000 gallons of B20 over a 2-year period.

Mercer County

- City of Trenton Police Department Operates 14 dedicated CNG Ford Crown Victoria sedans, on loan from the N.J. State Police. Vehicles refuel at the State's CNG station at NJDOT headquarters in Ewing, Mercer County.
- o *College of New Jersey* Operates 5 Electruk ET-150 facility maintenance vehicles.
- Princeton University Two CNG shuttle buses, based on Ford E-450 dedicated cutaway vans, were delivered in November, 2003, along with a FuelMaker with fast-fill capability. A CNG Zamboni is in use at the University ice rink. The fleet also includes one Toyota Prius hybrid-electric vehicle.

Middlesex County

- o *Air and Gas Technologies* CNG refueling equipment supplier currently services over 40 CNG stations in New Jersey, Pennsylvania and New York. They operate 4 bi-fuel CNG vans and 1 CNG forklift. Vehicles are refueled on-site using a FuelMaker with fast-fill capability.
- o *Old Bridge Municipal Utilities Authority* Installed a FuelMaker slow-fill CNG refueling appliance; operates 2 Ford F-150 bi-fuel CNG vehicles.
- o *Rutgers University* Installed a combination fast/time-fill FuelMaker CNG refueling appliance and operates 6 Honda Civic GXs and 2 Chevy Cavalier bi-fuel CNG vehicles.

Monmouth County

- o *Belmar Borough* Operates 2 Ford F-150 bi-fuel propane pickup trucks.
- o *Monmouth County Park System* Operates 1 GEM electric vehicle.
- o *Motors Fleet Management* A franchised dealer for the sale of Chevrolet, Dodge and Ford AFVs, as well as Toyota Prius hybrid-electric vehicles, Motors Fleet has numerous AFV contracts with the State of New Jersey, and offers AFV service and mechanics training. Operates 2 FuelMaker refueling appliances.
- O New Jersey Natural Gas Corporation (NJNG) NJNG currently operates approximately 20 light-duty CNG vehicles, as well as 3 heavy-duty bi-fuel CNG trucks. Plans are to use banked AFV credits to offset future purchase requirements.
- o **Pro Energy Corporation** This company converts vehicles to operate using CNG and LPG, and has been the State's contract vendor for vehicle conversions and maintenance of those vehicles since 1995.

Ocean County

- o *Dover Township* Parking Authority operates 1 Cushman ZEV electric utility vehicle.
- o *Lakehurst Naval Warfare Center* Operates 61 bi-fuel CNG vehicles and 2 dedicated CNG 15-passenger vans.
- o *Ocean County government (Toms River)* Operates one light-duty CNG vehicle; two FuelMakers have been installed.

Passaic County

o William Paterson University (Wayne) — Signed MOU with BPU to participate in Biodiesel Fuel Rebate Program by using biodiesel fuel (B20) in campus vehicles. University will be reimbursed for incremental costs of approximately 12,000 gallons of B20 over a 2-year period.

Salem County

o *Garden State Ethanol*, *Inc.* – A farmer's consortium organized to create additional markets for local corn crops, Garden State Ethanol, Inc. is in the process of obtaining local approvals to construct a 40 million gallon a year ethanol manufacturing facility.

Union County

o *Elizabethtown Gas Company/NUI (ETG)* - The state's first CNG filling station (50 SCFM) is still in operation at ETG's Green Lane facility in Union Township. ETG now has 57 CNG vehicles in its fleet, as well as 3 tow-behind compressors that operate on CNG and 4 CNG forklifts.

B. DOE-funded Contractor Support

In the past year, with the addition of DOE-funded contractor support services, the pace of NJCCP activity has been increased. Table 1, below, summarizes some of the recent activities undertaken by the State's Clean Cities contractor, Antares Group.

	Meeting			
Date	Type	Purpose	Guest/Comment	Location
Dec 02	NJCCP	Quarterly Meeting	NJBPU Comm. Jack Alter	Newark, NJ
Jan 03	Advocacy	Assembly Support	Assemblyman Gordon Johnson	Englewood, NJ
Feb 03	Regional DOE	Networking	Deputy Coordinator Attended	Philadelphia. PA
Mar 03	Advocacy	Recruitment	Spoke at Work Truck Meeting	Parsippany, NJ
Mar 03	NJCCP	Quarterly Meeting	Assemblyman Gordon Johnson	Newark, NJ
April 03	Ceremony	Networking	NYC Clean Cities Designation	NYC City Hall
May 03	Advocacy	Membership Recruitment	Spoke at NJ Motor Truck Association	NJ
Jun 03	NJCCP	Quarterly Meeting	Solectria and GEM	Newark, NJ
June 03	Annual USDOE Clean Cities	Networking		Palm Springs, CA
July 03	Advocacy	Passaic County Support	Met with County Planner and Freeholders	Paterson, NJ
Sept 03	National	Annual NGVC Meeting	Represented NJCCP	Las Vegas, NV
Sept 03	Advocacy	William Paterson University	Met with Facilities Manager	Wayne, NJ
Oct 03	Advocacy	NJ Propane Gas Association	Guest Speaker at NJPGA annual meeting	Iselin, NJ

Table 1: Clean Cities Coordinator – Public Activities 2003

Antares prepared a newsletter after three of the NJCCP meetings, informing the more than 250 names on the NJBPU/NJCCP mailing list of the program's activities and other events important to Clean Cities stakeholders and potential stakeholders. Copies of the three newsletters are attached.

C. NGV Demonstration Program

In the past several years, members of the NGV Working Group have initiated an NGV Demonstration Program. The key stakeholders in this effort have been Air & Gas Technologies (a CNG equipment supplier), American Honda Motor Co., FuelMaker Corp., Honda of Princeton, Public Service Electric and Gas (PSEG) and, until recently, Ford Motor Company. Participants in the Demonstration Program receive one or more Honda Civic GXs or Ford F-150 CNG pickups on loan for up to one month, and a FuelMaker refueling appliance is installed at the participant's location.

The following table lists the participants to date, and the AFV and FuelMaker purchases resulting from the demonstration program.

	RESULTS			
Location	Vehicles	Station		
Jersey City				
Wayne				
Montclair	6 - Honda GXs	FuelMaker – Time-fill		
Hackensack				
North Bergen				
Kearny	2 - Chevy Cavaliers, 1 – GMC Sierra p/u	FM Combo Time & Fast-fill		
Princeton University	2 - E450 Shuttle buses	FuelMaker Quad Time-fill		
Middlesex County				
Paramus	2 - Honda GXs	FuelMaker – Time-fill		
Guttenberg	1 - Honda GX	FuelMaker – Time-fill		
Ramapo College	1 - Ford 8-pass van	FuelMaker – Time-fill		
Rutgers University	6 - Honda GXs, 2 Cavaliers	FM Combo Time & Fast-fill		
N. W. Bergen County Utilities Authority	3- Ford Vans	FuelMaker – Time-fill		
Mahwah				
Montvale*				
NJ Meadowlands Commission*				
Cape May	TBD	TBD		
Wildwood				

^{*} currently hosting demo

NOTE: The purchase/lease of NGVs involves a long lead time and is impacted by available budget.

Table 2: Clean Cities NGV/CNG Demonstration Program

D. Exhibition at Annual Statewide Conferences

For several years, the NJCCP has exhibited at two major statewide conferences held in Atlantic City: the New Jersey State League of Municipalities (LOM) Conference, held each November, and the Trans Action Conference, held in April. At both events, the benefits of alternative fuel vehicles, the Clean Cities Program and the NGV Demonstration Program are stressed. At the 2003 LOM conference, a Honda Civic GX, a Ford F-150 dedicated CNG pickup and a FuelMaker refueling appliance were all displayed at the Clean Cities booth. Approximately 40 leads were generated, most from municipal and county governments interested in beginning alternative fuel vehicle programs.

There are other statewide conferences held each year, including the New Jersey Conference of Mayors and the School Boards Conference, and the NJCCP is looking into exhibiting at one or more of these, as well.

V. New Jersey Alternative Fuel Vehicle Funding and Incentive Programs

A. <u>Alternative Fuel Vehicle (AFV) Rebate Program</u>

Several years ago, the New Jersey Board of Public Utilities, Office of Clean Energy, worked with the New Jersey Department of Transportation to secure \$500,000 in Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding to expand Clean Cities activities to non-attainment areas throughout the state. This funding was used to establish New Jersey's Alternative Fuel Vehicle Rebate Program. This program provides rebates to local government entities, including counties, municipalities, governmental authorities and school districts, to offset the incremental costs of acquiring alternative fuel vehicles, including both conversions and new vehicle purchases.

<u>Note</u>: Although the DOE does not consider hybrid-electric vehicles to be AFVs, they were included as eligible vehicles under New Jersey's AFV Rebate Program because of their use of electric power, their high fuel efficiency and the contribution they can make toward meeting the EPAct goals of petroleum displacement. Under New Jersey's program, reighborhood electric vehicles (NEV) are also eligible for rebate funding, even though they are not full-size vehicles, because of the petroleum displacement and air quality improvement benefits that can be realized from their use in certain niche markets.

Rebate amounts are as follows:

Light Duty Vehicles (under 8,500 lbs. GVWR)

- ? Up to \$4,000 toward the incremental cost of a dedicated AFV or hybrid-electric vehicle
- ? Up to \$2,000 toward the incremental cost of a bi-fuel AFV

Medium Duty Vehicles (8,500 – 14,000 lbs. GVWR)

- ? Up to \$7,000 toward the incremental cost of a dedicated AFV or hybrid-electric vehicle
- ? Up to \$4,000 toward the incremental cost of a bi-fuel AFV

Heavy Duty Vehicles (over 14,000 lbs. GVWR)

- ? Up to \$12,000 toward the incremental cost of a dedicated AFV or hybrid-electric vehicle
- ? Up to \$6,000 toward the incremental cost of a bi-fuel AFV

Although the rebate program was introduced in November 1999, interest in AFVs by local governments in New Jersey has been building more recently, in large part due to the efforts of the NGV Working Group and the NGV Demonstration Program. As of March 31, 2004, a total of \$271,000 in rebates had been awarded to 17 different applicants, for the purchase of the following 70 vehicles:

- ? 25 dedicated CNG
- ? 7 bi-fuel CNG
- ? 2 bi-fuel propane
- ? 29 hybrid-electric
- ? 7 small electric

Approximately \$229,000 in AFV Rebate Program funding remains available. It is anticipated that this funding will be exhausted within the current year.

B. Biodiesel Fuel Rebate Program

In July, 2003, the Office of Clean Energy introduced New Jersey's Biodiesel Fuel Rebate Program. This program is funded by \$500,000 in Petroleum Violators Escrow (PVE) account monies, known in New Jersey as Petroleum Overcharge Reimbursement Fund (PORF) monies. The Biodiesel Fuel Rebate Program provides rebates to local government entities, including counties, municipalities, governmental authorities and school districts, for the incremental costs of purchasing biodiesel fuel, in lieu of petroleum diesel.

As of March 31, 2004, five applications have been submitted, for programs at the Medford Twp. Board of Education, Jersey City, Teaneck Township, William Paterson University in Wayne and the Port Authority of New York and New Jersey. A total of \$187,400 in funding has been committed for these projects. Several other municipalities have requested applications, and we anticipate that they will also apply and be accepted into the program.

C. Alternative Fuel Infrastructure Program

In July, 2003, the Office of Clean Energy introduced New Jersey's Alternative Fuel Infrastructure Program, which is also funded by \$500,000 in PORF monies. This

program will rebate 50% of the costs of purchasing and installing infrastructure used for refueling AFVs, up to a maximum of \$50,000 per applicant. Local government entities, including counties, municipalities, governmental authorities and school districts are eligible for rebates under this program. As of March 31, 2004, three applications for infrastructure rebates have been submitted, requesting approximately \$17,000 in rebates.

Table 3 provides a summary of the funds remaining in each program.

	Amount	
Rebate Program	Remaining	Purpose
AFV	\$229,000	Supports Purchase of AFVs and Hybrids by paying a portion of incremental vehicle costs.
Biodiesel	\$319,000	Provides incremental cost of purchasing biodiesel fuel in lieu of 100% petroleum diesel
Infrastructure	\$483,000	Funds 50% of cost of purchasing and installing Alternative Fuel Refueling Infrastructure

Table 3: NJCCP Local Government Rebate Programs

VI. Structure of the New Jersey Clean Cities Program

A. The Clean Cities Coordinator

The Clean Cities Coordinator administers the NJCCP, and will report to the Steering Committee. From the inception of the NJCCP in 1997, the Coordinator position has been located at the NJBPU. Ellen Bourbon, the NJBPU's Alternative Fuels Project Manager, served as Coordinator from 1997 through the fall of 2002. Initially, the goal was for the NJBPU to support the Program Coordinator position until another stakeholder was able to assume that responsibility; however, funding and time constraints have prevented any of the other stakeholders from taking on the Coordinator role.

In 2001, the NJBPU applied for a DOE grant for Clean Cities Coordinator support under the State Energy Program's Special Projects solicitation. DOE awarded a \$25,000 grant to the NJBPU, and the NJBPU provided \$25,000 in matching funds. After going out to bid, the NJBPU awarded a contract for Coordinator support to Antares Group, Inc., in October, 2002. Art Vatsky of Antares Group Inc. has been serving as Coordinator. Greg Wilcox, also with Antares Group, Inc., is serving as Deputy Coordinator.

In 2003, the NJBPU applied for and was awarded an additional \$20,000 in funding from DOE for coalition support, which is being matched by \$35,000 in funding from the NJBPU. As required by State procurement regulations, the NJBPU will go out to bid for those services once again, in early 2004.

Coordinator Responsibilities

The NJCCP Coordinator's general responsibilities are listed below:

- Coordinate and document coalition meetings and activities;
- Maintain a database of stakeholders, local fleets, AFVs and refueling infrastructure:
- Act as liaison between the Steering Committee, Working Groups and DOE;
- Disseminate information to stakeholders through newsletters, e-mails, and phone contacts;
- Monitor Federal/State/local legislative and incentive information and disseminate to Clean Cities coalition members;
- Aggressively seek funding for AFV projects from federal, state and other sources. Work with the NJBPU and the Funding & Project Development Working Group to draft and submit proposals for funding.
- Assist coalition members with public education activities and new stakeholder recruitment:
- Assist with overall implementation and periodic updates of Program Plan and MOU;
- Represent the NJCCP at local functions and DOE events.

B. The Steering Committee

In 1996, when the NJCCP was initiated, there was a very active group of stakeholders that participated in the development of the Program Plan. Thirty stakeholders signed the Memorandum of Understanding at the designation ceremony held in October, 1997. All of these signatories were included as members of the original Steering Committee.

In the more than six years since designation, a number of new stakeholders have become involved with the NJCCP, while some of the original stakeholders are no longer active. As part of the MOU renewal process, the NJCCP examined successful Clean Cities coalitions from across the country for examples of effective steering committee structures.

Based on a review of other Clean Cities programs, and additional stakeholder input, the NJCCP has established a new Steering Committee structure. The revised structure is intended to reflect the different and sometimes competing interests of the various stakeholders. Key stakeholders that have been actively involved with the NJCCP since

its inception will continue to play a role in the further development of the NJCCP. Interaction between the various groups at the Steering Committee level may help lead to more active member participation and more involved decision-making.

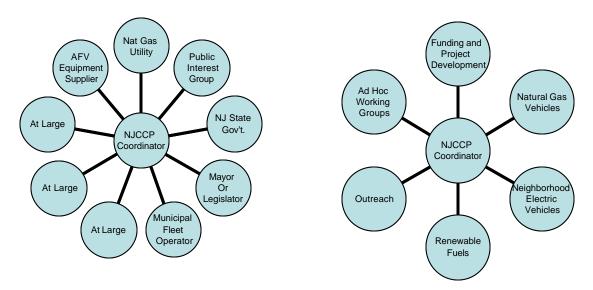


Figure 2: NJCCP Steering Committee Composition

Figure 3: NJCCP Working Groups

Steering Committee Composition: The Steering Committee will provide direction and oversight for the NJCCP, and will be composed of 9 NJCCP stakeholders representing the diverse membership of the coalition. In order to ensure objective and balanced representation, as well as fuel neutrality, the Steering Committee will be composed of the following stakeholders:

- ? 1 natural gas utility member
- ? 1 public interest or non-profit group member
- ? 1 State government member
- ? 1 local government or legislative member
- ? 1 municipal or county fleet operator
- ? 1 OEM vehicle dealer or manufacturer, AFV equipment supplier or alternative fuel supplier
- ? 3 at-large members who may be representatives of any group

In any matters requiring a vote, each member of the Steering Committee will have one vote. A Steering Committee Chair will be elected by the members. See Figure 2.

<u>Method of election</u>: Initially, the Steering Committee will be appointed, with elections being held after one year, at an NJCCP quarterly meeting. In order to be eligible to vote, a stakeholder must sign the NJCCP MOU and be a member of the NJCCP for at least one year, prior to the elections.

Term: Members of the Steering Committee will serve for 2-year terms.

C. Working Groups

Five working groups, representative of current NJCCP activities and interests, have been set up, as shown in Figure 3.

1) Funding and Project Development

The Funding and Project Development Working Group will identify possible sources of funding for Clean Cities activities, and will prepare and submit proposals for financial assistance. In particular, the Funding and Project Development Working Group will seek funding from the State Energy Program (SEP), various DOE and EPA solicitations, and the Congestion Mitigation and Air Quality Improvement Program (CMAQ).

The Funding and Project Development Working Group members are as follows:

- ? American Honda Motor Co.
- ? Antares Group, Inc.
- ? Borough of Carteret
- ? Howard L. Bragg
- ? Cable Car Concepts
- ? eMobility International, LLC

- ? EPA Region 2
- ? FuelMaker Corp.
- ? Medford Twp.
- ? NJBPU
- ? New Jersey Propane Gas Association

2) Natural Gas Vehicles

The Natural Gas Vehicle (NGV) Working Group has been active in the NJCCP for several years. Members of this working group include utilities, original equipment manufacturers (OEMs), refueling equipment suppliers and fleets that utilize NGVs. The NGV Working Group initiated the NGV Demonstration program in New Jersey, which has resulted in over a dozen municipalities and state colleges testing a variety of natural gas vehicles. The NGV Working Group has focused mainly on light–duty vehicles to date; however, there has recently been an increase in interest in natural gas shuttle buses. The NGV Working Group will include this segment of the market, as well.

The NGV Working Group members are as follows:

- ? Air and Gas Technologies
- ? American Honda Motor Co.
- ? Borough of Carteret
- ? Cable Car Concepts
- ? College of New Jersey
- ? eMobility International, LLC
- ? FuelMaker Corporation
- ? Honda of Princeton

- ? Lincoln Services & Equipment
- ? Montclair Township
- ? Motors Fleet Management
- ? NJBPU
- ? New Jersey Natural Gas Co.
- ? Propane Equipment Corporation
- ? Public Service Electric and Gas

3) Neighborhood Electric Vehicles

Neighborhood electric vehicles (NEV) are small, 2-4 passenger vehicles, similar in size to golf carts, and capable of operating at speeds up to 25 mph. NEVs are finding a niche in many states as delivery and service/support vehicles, as well as a means of transportation for short, around-town trips. New Jersey has a large shore-based vacation industry and many retirement communities, making NEVs an attractive alternative to gasoline powered vehicles. Using full-size automobiles for short trips wastes energy and generates high emissions because the vehicles are operated while the engines are still cold and the exhaust catalysts have not yet reached their working temperature.

Legislation has been passed in more than 30 states allowing NEVs to operate on state roads with speed limits of 35mph or below. NJCCP members initiated discussions in 2003 with a member of the New Jersey State Assembly's Transportation Committee regarding the introduction of similar legislation. The NEV Working Group will expand these efforts, with the goal of having NEV-friendly legislation introduced and passed by December, 2004.

The NEV Working Group Members are as follows:

- ? Borough of Carteret
- ? College of New Jersey
- ? Einsteins Mobile Upfitters
- ? Global Electric Motorcars, LLC (GEM), a subsidiary of DaimlerChrysler AG
- ? NJBPU
- ? Remsen Dodge

4) Renewable Fuels

The use of renewable fuels, such as biodiesel and ethanol, can create both farming and industrial jobs in New Jersey, while lowering our dependence on foreign oil. Biodiesel and ethanol (E85) are not competing fuels since biodiesel is used in compression ignition (diesel) vehicles only and E85 vehicles are generally light-duty spark ignited (gasoline) vehicles. State and local government agencies can purchase B20 (a blend of 20% biodiesel and 80% petroleum diesel) directly off state contract #T-1844. Plans are underway for a 40 million gallon ethanol production facility in Salem County that could be a local source of E85.

The Renewable Fuels Working Group will contact their counterparts in other Clean Cities coalitions for assistance in developing outreach programs to promote the use of biodiesel, E85 and low percentage fuel blends such as B2, B5 and E10, among the public and private sectors, including the off-road vehicle market. The group will also monitor and track federal and state legislation affecting the production and use of these fuels.

The Renewable Fuels Working Group includes:

- ? eMobility International, LLC
- ? Garden State Ethanol, Inc.
- ? Medford Township
- ? NJBPU
- ? World Energy Alternatives, LLC

5) Outreach

The Outreach Working Group will work with county and local governments, the state legislature, the State's 3 metropolitan planning organizations and private fleet managers to raise awareness of the Clean Cities goals of reducing our dependence on imported petroleum and improving air quality. They will encourage local governments to adopt resolutions and ordinances committing their communities to reducing their use of vehicular petroleum by incorporating AFVs, hybrid-electrics, fuel economy and idle reduction technologies wherever possible.

The Outreach Working Group members are:

- ? Air & Gas Technologies
- ? Antares Group, Inc.
- ? Howard L. Bragg
- ? Global Learning, Inc.
- ? Montclair Township

- ? NJBPU
- ? N.J. Higher Education Partnership for Sustainability
- ? TransOptions

6) Ad Hoc Working Groups

As needed, various working groups will be formed to focus on particular fuels or issues. Among the possible working groups that may form in the future are the following:

- ? Propane: The New Jersey Propane Gas Association was an original stakeholder of the NJCCP and was active in initiating a propane vehicle program for the State government fleet. While there is a limited choice of LPG engines available today, there is potential for growth in the medium duty truck and van category. New propane school buses have also been developed recently, and the GM cutaway chassis with a propane engine may fill the gap left by the exit of the Ford CNG cutaway chassis.
- ? <u>Alternative Fuel School Buses</u>: New Jersey currently has no school buses that operate using natural gas or propane. One factor contributing to this is New Jersey school bus specifications (notably the specifications for seat width) which differ from the specifications in the other 49 states. Until these specifications can be modified, there will likely be no AFV school buses operating in the state.

? <u>Hydrogen</u>: Barring several technological breakthroughs, the wide availability of hydrogen-powered motor vehicles is likely decades away. As the introduction of hydrogen vehicles draws nearer, coalition members may want to form a hydrogen working group to address issues such as fuel storage, refueling, etc.

Table 4 indicates various niche markets that could be addressed by current and future working groups.

Market Niche/ Fuel	Existing Heavy- Duty	New Heavy- Duty	Transit (over 28')	Transit (under 28')	Existing Light- Duty	New Light- Duty	Small Service Vehicles
Natural Gas		X	Х	X SI		X	
Biodiesel (B20)	X Cl as-is	Х	X CI as-is	X Cl as-is			
Electricity							Χ
Ethanol (E85)					X E85 Models Only	X E85 Models Only	
Hybrid-Electric/ Hydrogen		X	Х			X	
Liquified Propane Gas (LPG)	X SI Retrofit	X	Х				

Table 4: NJCCP Public Sector Niches (Note: CI = Compression ignition (i.e. diesel engines, SI = spark ignition engines)

In addition to the Steering Committee and Working Group members, the NJCCP includes a number of other interested parties that are committed to increasing the number of alternative fuel vehicles in New Jersey. The NJCCP directory, which includes the addresses, phone and fax numbers of current Stakeholders, as well as other interested parties, is included as Appendix D.

VII. Goals and Objectives of the New Jersey Clean Cities Program

A. Short Term Goals (1-year)

1) CMAQ Funding

Work with the North Jersey Transportation Planning Authority (NJTPA), the Delaware Valley Regional Planning Commission (DVRPC), the South Jersey Transportation Authority (SJTA) and county representatives to develop at least 1 AFV project proposal that utilizes available CMAQ funding in each region.

2) Outreach

Work with the NJTPA, DVRPC, SJTA, and other organizations, such as the N.J. State League of Municipalities and the N.J. Conference of Mayors, to disseminate information on AFVs and available AFV rebate programs to county and local officials throughout the state, through their newsletters, regular meetings and targeted mailings. Encourage local governments to pass ordinances and resolutions committing to reducing their use of vehicular petroleum. There are 566 municipalities in the state, as well as 609 school districts. Table 5 indicates the number of local government agencies in New Jersey's 21 counties.

Number	County	Municipalities ¹	School Districts ²	Population ³
1	Atlantic	23	25	255,552
2	Bergen	70	77	884,118
3	Burlington	40	43	423,394
4	Camden	37	42	508,932
5	Cape May	16	19	102,326
6	Cumberland	14	16	146,438
7	Essex	22	22	793,133
8	Gloucester	24	28	254,673
9	Hudson	12	13	608,975
10	Hunterdon	26	29	121,989
11	Mercer	13	11	350,761
12	Middlesex	25	25	750,162
13	Monmouth	53	55	615,301
14	Morris	39	42	470,212
15	Ocean	33	30	510,916
16	Passaic	16	20	489,049
17	Salem	15	15	64,285
18	Somerset	21	22	297,490
19	Sussex	24	26	144,166
20	Union	21	23	522,541
21	Warren	22	26	102,437
	Total	566	609	8,414,350

Table 5: New Jersey County Government, School District and Population Statistics

¹ Municipal Reference Guide: New Jersey 2003/2004 Edition. Towndata.com Network, Inc.

² The New Jersey Municipal Data Book, 2003 Edition. Information Publications

³ Ibid. 2000 Census

3) <u>NEV Legislation</u>

Work with the State Legislature's Transportation Committee to have NEV legislation introduced and passed by December, 2004.

4) Shared Use of CNG Facilities

Work with the State of New Jersey to develop a program that will allow the shared use of State-operated CNG stations by county and local government fleets.

5) Statewide Conferences

Continue to sponsor a Clean Cities booth at two or more of the following annual conferences:

- ? New Jersey State League of Municipalities Conference This conference attracts approximately 10,000 state and local officials and is held each November in Atlantic City.
- ? *NJDOT TransAction Conference* This statewide transportation conference is held each April in Atlantic City and attracts approximately 900 transportation officials from throughout the State.
- ? New Jersey Conference of Mayors Held each April, this conference targets the Mayors of New Jersey's 566 municipalities.
- ? New Jersey School Boards Conference This conference is held each fall.

6) NGV Demonstration Program

The NGV Working Group will work to increase the number of participants in the NGV Demonstration Program, using leads generated at the League of Municipalities Conference and the Conference of Mayors. The primary target groups will be public colleges and universities, counties and municipalities, in order to take advantage of the rebate monies available to local government entities.

7) Advancing the Choice Event

In conjunction with a county government, hold an event targeted at local officials to promote the use of AFVs, alternative fuels and hybrid-electric vehicles.

8) Newsletters and Meetings

Continue to hold quarterly meetings and publish a quarterly NJCCP newsletter.

B. Long Term Goals (1 - 5 year timeframe)

1) <u>Funding for Private Sector Projects</u>

While the NJCCP has been successful in obtaining funding for public sector AFV projects, we do not yet have funding available for private sector AFV projects. There are hundreds of delivery truck fleets throughout New Jersey that are currently using diesel fuel that would benefit from access to biodiesel fuel at competitive prices. Likewise, we have identified numerous private sector fleets that are interested in using CNG in their operations, but cannot switch to CNG without funding assistance. Assistance for the promotion of other alternative fuels, including E85 and propane, will also be investigated. The Funding and Project Development Working Group will take the lead in obtaining this funding.

2) Rebate Programs

Utilize available funding in the NJBPU's three rebate programs for AFVs, biodiesel fuel and refueling infrastructure. As those funds become fully expended, seek out additional funding sources to continue and expand the programs.

3) CNG Stations

Establish at least two new CNG refueling sites in New Jersey, accessible to State and local governments, and private fleets, if possible. Targeted areas are the City of Newark and the New Brunswick area of Middlesex County.

4) Renewable Fuel Blends

Introduce low level blends of renewable fuels with petroleum fuels, such as B2, B5 and E10. In particular, develop a program to market these blends to New Jersey's farmers.

5) CNG School Buses

Initiate a natural gas school bus program in a New Jersey school district. To date, there are no CNG buses operating in New Jersey.

6) NJCCP Stakeholders

Increase the number of active NJCCP stakeholders. Efforts will be made to involve representatives of each of the 21 county governments covered by the NJCCP, as well as several municipalities from each county. Private fleets will also be targeted, with the goal of adding 5 private fleets a year as stakeholders.

7) Investigate Non-Profit Status

Many Clean Cities coalitions have opted to convert to 501(c)(3) non-profit organizations, to give them access to a wider range of funding sources. The NJCCP will investigate the benefits and drawbacks of this option.

8) E85

Once Garden State Ethanol has established its plant in Salem County, develop an E85 program involving a large New Jersey fleet.

9) Dual-fuel, CNG/diesel vehicles

Promote the use of dual-fuel (CNG/diesel) heavy-duty vehicles. This technology works by adapting the existing compression ignition engines in most heavy duty vehicles to use a small amount of diesel to ignite a main charge of natural gas. This results in cleaner emissions at lower cost than would be required to change the engine to operate using only natural gas.

10) <u>Idle-Reduction Programs</u>

Work with the NJDEP and NJDOT to develop idle-reduction programs at several truck stops along the New Jersey Turnpike.

Appendix A: Memorandum of Understanding

List of Signatories

Air & Gas Technologies

American Honda Motor Company

Antares Group, Inc.

Arcola Sales and Service Corp.

Borough of Carteret

Howard L. Bragg

Cable Car Concepts

The College of New Jersey

Einsteins Mobile Upfitters

eMobility International, LLC

FuelMaker Corporation

Garden State Ethanol, Inc.

Global Electric Motorcars, LLC

Global Learning, Inc.

Lincoln Services and Equipment

Medford Twp. Public Schools

Millenium Cell, Inc.

Montclair Township

Motors Fleet Management/Sansone Dealer Group

New Jersey Board of Public Utilities (NJBPU)

New Jersey Higher Education Partnership for Sustainability (NJHEPS)

New Jersey Natural Gas Company

New Jersey Propane Gas Association

New Jersey Transit Corporation

NUI Utilities Inc. (NUI Elizabethtown Gas Company)

The Port Authority of New York and New Jersey

Propane Equipment Corporation

Public Service Electric & Gas (PSE&G)

Rutgers University

Sprague Energy

Suburban Propane

Teaneck Township

TransOptions

USEPA Region II

World Energy Alternatives

New Jersey Clean Cities Program

Memorandum of Understanding (MOU)

The members of the New Jersey Clean Cities Program (NJCCP), organized as part of the U.S. Department of Energy (DOE) Clean Cities Program, and operated under the auspices of the New Jersey Board of Public Utilities; join together for the purpose of:

- (1) Reducing dependence on petroleum-based and imported fuels by fleets in New Jersey, as specified in the federal Energy Policy Act of 1992;
- (2) Complying with the health-based air quality standards for ozone, carbon monoxide and particulates contained in the federal Clean Air Act Amendments of 1990:
- (3) Carrying out New Jersey's air quality and energy policies in a coordinated manner;
- (4) Increasing public awareness of the energy security and air quality benefits of using alternative motor fuels and hybrid-electric vehicles;
- (5) Encouraging the development of refueling, service and maintenance facilities for alternative fuel and hybrid-electric vehicles

Purpose of MOU

The purpose of this Memorandum of Understanding (MOU) is to set forth the agreements, respective responsibilities and procedures necessary to carry out the objectives of the NJCCP, a voluntary program sponsored by the DOE to expand and accelerate the use of alternative fuel vehicles (AFVs) and hybrid-electric vehicles.

Guidelines

The NJCCP will be administered according to the Program Plan. The signatories herein agree that the Program Plan is designed to achieve the objectives of the Clean Cities Program and follows the guidelines described below:

- Sets forth goals defining what the NJCCP seeks to accomplish and why.
- Creates an organizational structure enabling the NJCCP to effectively carry out its mission.
- Gathers primary information on fuels, vehicles and infrastructure from participating NJCCP stakeholders.
- Sets forth intermediate objectives and action steps, designed to be the "how to" elements of the Program Plan.

- Establishes timetables for achieving goals and objectives.
- Establishes a monitoring system for program management, advertisement of program success and method for conveying program performance to DOE.

Public Information Coordination

Subject to the Freedom of Information Act (5 U.S.C. 552), decisions on disclosures of information to the public regarding projects and programs referenced in this MOU shall be made by the DOE following consultation with the other parties' representatives.

Authority

This MOU is authorized under the following laws and regulations: the Energy Reorganization Act of 1974, which permits DOE to use the facilities of public agencies, requires DOE to consult with the heads of other agencies on the use of their facilities, and allows DOE to enter into cooperative projects with other public and private agencies, and the Energy Policy Act of 1992 (EPAct), Section 505, Voluntary Supply Commitments, which requires DOE to obtain voluntary commitments to help achieve replacement fuel goals from fuel suppliers, fleet owners, and vehicle suppliers.

Policy

This MOU is non-binding; it is not intended to and does not create any contractual rights or obligations with regard to the signatories or any other parties. This MOU may be amended with the written consent of a majority of the NJCCP stakeholders. Participation in the NJCCP may be terminated by any signatory upon thirty (30) days written notice to the other parties. This MOU may be terminated by the mutual written agreement of the signatories. The responsibilities of the signatories are summarized in Attachment A to the Program Plan.

Effective Date

This MOU shall become effective on April 30, 2004 and shall remain effective for a period of 5 years, upon which the MOU becomes eligible for renewal.

NJCCP Stakeholder Commitments

	Undersigned agrees to support the efforts of the NJCCP, as identified below. Pleas k all that apply:
1)	Alternative Fuel Infrastructure Development – Activities can include installing alternative fuel infrastructure or fuel management systems, assisting in developing publicly accessible alternative fuel infrastructure, manufacturing or selling alternative fuel infrastructure.
2)	Alternative Fuel Vehicle (AFV) Acquisitions – The undersigned organization plans to acquire AFVs as follows:

Year	# of Light Duty	# of Heavy Duty	# of Hybrid-electric
	AFVs/Fuel Type(s)	AFVs/Fuel Type(s)	vehicles
2004			
2005			
2006			
2007			
2008			

3)		AFV Sales and Service	Activities	include promo	ting the use of AFVs at
		ships, trade shows and three for AFVs and/or mechan			ts and providing
4)	and eth	Renewable Fuel Use – Inanol.	Includes usir	ng renewable fi	uels such as biodiesel
5)	Clean	Alternative Fuels Pron tive fuels workshop, writ Cities Program and altern on the benefits of Clean	ing and/or po a tive fuels a	ublishing articl nd speaking at	es or newsletters on the
6)	NJCC	Working Group Member 19 Working groups:	bership – Se	rving on one or	r more of the following
	_	Funding and Project Dev Natural Gas Vehicles Neighborhood Electric V	•		Renewable Fuels Outreach
7)	new st	Stakeholder Development akeholders and other interest			ntifying and recruiting
Signe	d:			Date:	
For:		(Print Name)			
		(Organization Name)			
Addre	ss:			Phone:	
				FAX:	
				E-mail:	

Please submit by March 26, 2004 to:

Ellen Bourbon, Project Manager, NJBPU, P.O. Box 350, Trenton, N.J. 08625

Appendix B: AFV and Refueling Infrastructure Summary

Table B-1: AFV Summary

Organization

County

Number of Vehicles Fuel Type

County	Organization	venicles	Fuei Type
Regional	New Jersey Transit	81	5 CNG transit buses,
	Corporation		76 CNG commuter buses
Regional	Port Authority of New York	14	EV
_	and New Jersey	30	HEV
		204	CNG
		3	LPG
Regional	Public Service Electric & Gas	77	CNG (dedicated)
		228	CNG (bi-fuel)
Regional	State of New Jersey	107	CNG (dedicated)
		1634	CNG (bi-fuel)
		95	Propane (bi-fuel)
		8	Electric
		40	HEV
Regional	United States Postal Service	844	E85 (capable)
Bergen	Bergen County Government	5	CNG
Bergen	Town of Kearny	3	CNG (bi-fuel)
Bergen	Paramus Borough	2	CNG (dedicated)
Bergen	Park Ridge Borough	1	HEV
Bergen	Ridgewood Village	2	HEV
Burlington	Medford Township School	40	B20
	District		
Camden	City of Camden Police Dept.	14	CNG (dedicated)
Camden	Gloucester Township	2	CNG (dedicated)
Essex	Montclair Township	6	CNG (dedicated)
Hudson	Guttenberg Town	1	CNG (dedicated)
Hudson	Hudson County Improvement	1	CNG (dedicated)
	Authority		,
Mercer	City of Trenton Police	14	CNG (dedicated)
	Department		,
Mercer	College of New Jersey	5	EV
Mercer	Princeton University	2	CNG (dedicated)
		1	HEV `
Middlesex	Air and Gas Technologies	4	CNG (bi-fuel)
		1	CNG (dedicated)
Middlesex	Old Bridge Municipal Utilities	2	CNG (bi-fuel)
	Authority		
Middlesex	Rutgers University	6	CNG (dedicated)
		2	CNG (bi-fuel)
Monmouth	Belmar Borough	2	LPG (bi-fuel)
Monmouth	Monmouth County Park	1	EV (NEV)
	System		, ,
Monmouth	New Jersey Natural Gas	20	CNG (dedicated)
	Corporation	3	CNG (bi-fuel)
		1	. ,

Table B-1: AFV Summary (contd.)

Number of Vehicles Fuel Type

County	Organization	Vehicles	Fuei Type
Ocean	Dover Township	1	EV
Ocean	Lakehurst Naval Warfare	61	CNG (bi-fuel)
	Center	2	CNG (dedicated)
Ocean	Ocean County Government	1	CNG (dedicated)
	(Toms River)		
Union	Elizabeth Gas Company/NUI	57	CNG (dedicated)

Table B-2: Refueling Infrastructure Summary

1 abic 1	b-2. Refueinig init astructure b	diffinal y			Total Com	
Fuel Type	Station Name	Street Address	City	Com- pressor	Total Com- pressor SCFM	Access Type
CNG	PSE&G Plainfield Gas Shop	40 Rock Ave.	Plainfield	IMW Atlas	100	Private
CNG	PSE&G Orange Gas District	284 N. Park St.	East Orange	FuelMaker	25	Private
CNG	Sansone Chevrolet Maintenance Facility	680 Pfeiffer Blvd.	Perth Amboy		Maintenance only	Public
CNG	Comcast	800 Rahway Ave.	Union	Norwalk	100	Private
CNG	PSE&G New Brunswick Gas Shop	150 Howe Ln.	New Brunswick	Norwalk	100	Private; by arrange-ment
CNG	PSE&G Central Electric Division	472 Weston Canal Rd.	Somerset	Norwalk	150	Private
CNG	PSE&G Audubon Gas Shop	353 W. Nicholson Rd.	Audubon	IMW	100	Private; by arrangement
CNG	PSE&G Moorestown Electric Division	300 New Albany Rd.	Moorestown	Norwalk	84	Private
CNG	PSE&G Burlington Gas Shop	300 Connecticut Dr.	Burlington	Nuovo Pignone	233	Private
CNG	PSE&G Oakland Gas District	20 Van Vooren Dr.	Oakland	EDO-ANGI	30	Private
CNG	PSE&G Jersey City Gas District	444 St. Paul's Ave.	Jersey City	EDO-ANGI	30	Private
CNG	New Jersey Natural Gas Company (Wall Township)	1420 Wyckoff Rd.	Wall	Norwalk	134	Private, Gov't.
CNG	Downs Ford Maintenance Facility	360 Hwy. 37 East	Toms River		Maintenance only	Public
CNG	Pro Energy Corporation Maintenance Facility	11 Apple St.	Tinton Falls		Maintenance only	Public
CNG	Plaza Ford Maintenance Facility	3401 Rte. 66	Neptune		Maintenance only	Public
CNG	All American Ford Maintenance Facility	520 River Rd.	Hackensack		Maintenance only	Public

Table B-2: Refueling Infrastructure Summary (contd.)

Tubic D	-2. Returning initiastructure 5	difficulty (contain)			Total Com-	
Fuel Type	Station Name	Street Address	City	Com- pressor	pressor SCFM	Access Type
CNG	PSE&G Oradell GBU	451 New Milford Ave.	Oradell	FuelMaker	8	Private
CNG	Bergen County Department of Public Works	70 Zabriskie St.	Hackensack	Norwalk	50	Gov't Only
CNG	PSE&G Springfield GBU Headquarters	24 Brown Ave.	Springfield	EDO- ANGI	30	Private
CNG	NJDOT Fernwood Facility	1035 Parkway Ave.	Ewing Township	Ariel	100	Gov't Only
CNG	PSE&G Metro Electric Division	150 Circle Dr.	Clifton	FuelMaker	44	Private
CNG	PSE&G Clifton Gas District	240 Kuller Rd.	Clifton	Norwalk	100	Private
CNG	Elizabethtown Gas Company	Green Ln.	Union	Norwalk	50	Private
CNG	NJDOT Hamilton Facility	Rte. 130 and Kuser Rd.	Hamilton	Bauer	100	Gov't Only
CNG	NJDOT Cherry Hill Facility	Frontage Dr.	Cherry Hill	Bauer	80	Gov't Only
CNG	New Jersey Natural Gas Company Lakewood	775 Vassar Ave.	Lakewood	Norwalk	134	Private, Gov't.
CNG	Port Authority Newark Airport CNG Station	Bldg. 11 Automotive Shop	Newark	Norwalk	50	Private
CNG	Port Authority HT CNG Station	13 th & Provost Sts.	Jersey City	Norwalk	50	Private
LPG	Agway Energy Products	Rte. 206 N.	Augusta			Public
LPG	Country Gas Service	535 Rte. 38	Maple Shade			Public
LPG	Ferrelgas	47 Church St.	Franklin			Public
LPG	Suburban Propane	997 N. Pearl St.	Bridgeton			Public
LPG	Suburban Propane	Rte. 35 at County Road	Cliffwood			Public
LPG	Suburban Propane	2061 Rte. 9 N.	Howell			Public

Table B-2: Refueling Infrastructure Summary (contd.)

Total Comp-Fuel Zip ressor SCFM **Type Station Name Street Address** City Code **Access Type** 1124 S. White Horse LPG Suburban Propane Hammonton **Public** Pike LPG Rte. 15 at Rte. 94 Suburban Propane Public Lafayette LPG Suburban Propane 101 Rte. 17 N. Mahwah Public LPG Hometown Hearth & Grill 1142 Rte. 130 Robbinsville **Public** LPG Hometown Hearth & Grill 240 Rte. 10 W. Whippany Public LPG Valley National Gases, Inc. 201 Crown Point Rd. Public Thorofare 1 White Horse Pike & LPG U-Haul Absecon 08201 Public Rt. 30 U-Haul LPG 2102 St. Hwv 130 08077 Public Cinnaminson 08096 LPG U-Haul 1201 Hurffville Rd Deptford Public East LPG U-Haul 397 St. Hwy 18 08816 Public Brunswick LPG 07306 U-Haul 276 Tonnelle Ave. Jersey City Public LPG 07748 **U-Haul** 1014 St. Hwy 35 Middletown **Public** LPG Mount Laurel 08054 Public **U-Haul** 3690 St. Hwy 38 LPG U-Haul Old Bridge 08857 Public US Hwy 9 Scotch LPG 2025 US Hwy 22 U-Haul 07076 Public Plains White Horse Pike and U-Haul LPG Somerdale 08083 Public Park Ave. LPG 474 Brunswick Ave. 08638 Public **U-Haul** Trenton

Appendix C: Stakeholder Commitment Chart

Table C-1: Stakeholder Commitment Chart

Stakeholder Organization	Point of Contact	Area of Commitment	Specific Activities/Objectives and Estimated Timeframe
Air and Gas Technologies	Brian Keelen	Refueling infrastructure	Plan to add 1-2 CNG vehicles in 2004; NGV Working
j i	732-566-7227	(CNG)	Group, Outreach Working Group
American Honda Motor	Ira H. Dorfman	AFV Sales & Service	Funding & Project Development Working Group, NGV
Co.	202-393-8444	Alt. Fuels Promotion	Working Group
Antares Group, Inc.	Michael T. Panich	Alternative Fuels	Funding & Project Development Working Group,
	301-731-1900	Promotion	Outreach Working Group
Arcola Sales & Service	Michael A. Forcella	AFV Sales	One of the largest distributors of small and mid-size
Corp.	201-507-8500 x 66		buses in the Northeast; will promote use of AF buses.
Borough of Carteret	A. Neibert	AFV acquisitions,	Plan to acquire 2 AFVs , 6 hybrids in next 4 years;
	732-541-3810	Renewable fuel use	Funding & Project Development Working Group, NGV
			Working Group, NEV Working Group
Howard L. Bragg,	Howard L. Bragg	Alt. fuels, stakeholder	Funding & Project Development Working Group,
consultant	973-676-1058	promotion	Outreach Working Group, idle reduction programs
Cable Car Concepts	Dick Adelizzi	AFV sales – CNG and	Will be investigating operation of a City-sponsored
	609-884-4076	LPG powered cable car	AFV cable car in Cape May. Funding & Project
		vehicles.	Development Working Group, NGV Working Group
The College of New	Joe Sullivan	AFV use, alt. fuels,	Plan to acquire 2 additional AFVs in next 2 years.
Jersey	609-771-2353	infrastructure	NGV Working Group, NEV Working Group
		promotion	
Einsteins Mobile Upfitters	Peter J. Cantone	Working Group	NEV Working Group
	908-523-0551 x 104	membership	
eMobility International,	Ira H. Dorfman	Promotion of AFVs,	Funding & Project Development Working Group, NGV
LLC	202-393-8444	renewables,	Working Group, Renewable Fuels Working Group
		infrastructure	
FuelMaker Corporation	Mark Smith	Infrastructure Dev. &,	Funding & Project Development Working Group, NGV
	301-528-8400	Promotion	Working Group, Outreach Working Group

Table C-1: Stakeholder Commitment Chart (contd.)

Stakeholder Organization	Point of Contact	Area of Commitment	Specific Activities/Objectives and Estimated Timeframe
Garden State Ethanol	Dave Specca 609-499-5566	Ethanol production	Garden State Ethanol expects to produce ~ 40 million gallons of fuel grade ethanol for use as an additive or as E85. Plant should be operational in about 2 years.
Global Electric Motorcars, LLC	John R. Kennelly 701-446-0150	NEV sales	NEV Working Group
Global Learning, Inc.	Jeffrey L. Brown 732-528-0016	Outreach	Outreach Working Group
Lincoln Service & Equipment Co.	Joseph A. Rowe 1-800-573-5773	AFV Sales, Infrastructure Development	NGV Working Group, NEV Working Group, Stakeholder Development, will continue to promote and sell NEV and AF maintenance equipment (EV, CNG, LPG)
Medford Township Public Schools	Joe Biluck, Jr. 609-953-2507	B20 Fuel Use, AF promotion	Medford will continue to use B20 to operate its school bus fleet of approx. 40 vehicles. Funding & Project Development Working Group, Renewable Fuels Working Group, Outreach Working Group
Millennium Cell, Inc.	Rex E. Luzader 732-996-6544	AF promotion, infrastructure development	Will continue to promote the development and use of hydrogen fuel cells.
Montclair Township	Gray Russell 973-509-5721	AFV acquisition Renewable fuel use	Plan to acquire 2 additional Honda GXs and 2 hybrid SUVs in next 3 years. NGV Working Group, Outreach Working Group
Motors Fleet Management	John Himmelman; 732-918-1600	AFV and hybrid vehicle sales	AFV dealer for Chevrolet and Dodge. Toyota Prius HEV dealer. Offers AFV service and mechanics training. NGV Working Group
New Jersey Board of Public Utilities	Ellen Bourbon 609-984-3058	HEV use, alternative fuels promotion	Plan to acquire 6 HEVs over next 4 years. Member of all 5 Working Groups
New Jersey Higher Education Partnership for Sustainability (NJHEPS)	Donald F. Wheeler 973-596-2938	Alternative fuels promotion	Outreach Working Group

Table C-1: Stakeholder Commitment Chart (contd.)

Stakeholder Organization	Point of Contact	Area of Commitment	Specific Activities/Objectives and Estimated Timeframe
New Jersey Natural Gas Company	Bill Wells 732-919-8000	NGV Promotion	NGV Working Group
New Jersey Propane Gas Association	Robert Nicholson III 609-890-6094	AFV Sales, Service, Infrastructure	Funding and Project Development Working Group Stakeholder Development – will promote Clean Cities participation among member propane companies in N.J.
New Jersey Transit Corporation	Chris Moog 973-491-7649	Vehicles	NJT will acquire 5 HEV buses by the end of 2004, to replace 5 retiring CNG buses. Will continue to operate 76 CNG cruiser buses.
NUI Elizabethtown Gas Company	Steven L. Cook 908-289-5000	Infrastructure Development	Will continue to operate NGVs and refueling stations.
The Port Authority of New York and New Jersey	Sal D'Angelo 201-216-2368	AFV, HEV use Renewable fuel use	Plan to add approx. 40 NGVs and HEVs each year through 2008. Will continue to use B20. Working with Port Newark tenants to develop AFV programs.
Propane Equipment Corporation	Ray Sickles 732-747-3795	Refueling and service	Vehicle retrofitter (CNG/LPG), NGV Working Group
Public Service Electric & Gas (PSE&G)	Dick Duffy 973-430-7664	Infrastructure development, NGV promotion	NGV Working Group, stakeholder development
Rutgers University	Richard Bankowski 732-445-2550	AFV acquisitions	Plan to acquire 2 additional AFVs each year through 2008.
Sprague Energy	Steven J. Levy 914-328-6770	Infrastructure Development, AF Promotion	Will continue to promote and market renewable fuels.
Suburban Propane	Scott F. McLean 410-381-2984	Infrastructure, AFV sales & service	Will continue to promote the use of propane as an alternative vehicular fuel; idle reduction projects
Teaneck Township	Helene V. Fall 201-837-4811	Renewable fuel use	Signed MOU with BPU to begin using B20 in municipal diesel vehicles.

Table C-1: Stakeholder Commitment Chart (contd.)

Stakeholder Organization	Point of Contact	Area of Commitment	Specific Activities/Objectives and Estimated Timeframe
TransOptions, Inc.	Joseph R. Caravella 973-267-7600	Alternative fuels promotion	Outreach Working Group
USEPA Region 2	Andrew Bascue 212-637-3719	Alternative fuels promotion	Funding & Project Development Working Group
World Energy Alternatives	Nathan Tennant (617) 889-9000	Renewable, alt. fuels promotion	Will continue to market renewable fuels, including biodiesel, in N.J.

Appendix D: New Jersey Clean Cities Program Directory

Appendix E: NJCCP Newsletters